

## OPPORTUNISTIC PATTERN-BASED CPU FUNCTIONAL TESTING

### ABSTRACT OF THE DISCLOSURE

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One embodiment disclosed relates to a method of compiling a program to be executed on a target microprocessor. A cycle is identified during which a functional unit would otherwise be idle. A diagnostic operation is opportunistically scheduled for execution on the functional unit during that cycle, and a comparison is scheduled to compare a result from executing the diagnostic operation with a corresponding predetermined result.

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